

**Public Comments Solicited**

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;

(2) The location of any additional populations of this species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Any final decision on this proposal will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be received within 45 days of the date of publication of this proposal. Such requests must be

made in writing and addressed to the Field Supervisor (see ADDRESSES section).

**National Environmental Policy Act**

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

**References Cited**

- Brownell, R.L., P.K. Anderson, R.P. Owen, and K. Ralls. 1979. The status of dugongs at Palau, an isolated island group. Pp. 11-23 in *Proceedings of a Seminar/Workshop on the Dugong*, 8-13 May 1979. Department of Zoology, James Cook University of North Queensland.
- Brownell, R.L., J. Engbring, K. Ralls, and G.B. Rathbun. 1988. Status of dugongs in waters around Palau. *Marine Mammal Science* 4(3):265-270.
- Eldredge, L.G. 1991. Annotated checklist of the marine mammals of Micronesia. *Micronesia* 24(2):217-230.
- Marsh, H., T. O'Shea, T. Preen, G.B. Rathbun. 1991. An assessment of the status of the dugong in Palau: A preliminary report to the Palauan Government. Unpublished, 3 pp.
- Nowak, R.M. 1991. Walker's mammals of the world, fifth edition. The Johns Hopkins University Press, Baltimore and London, pp. 1294-1296.

**Author**

The primary author of this proposed rule is Karen W. Rosa, Pacific Islands Office (see ADDRESSES section).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

**Proposed Regulation Promulgation**

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

**PART 17—[AMENDED]**

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.11(h) by revising the entry for the Dugong (*Dugong dugon*) under MAMMALS in the List of Endangered and Threatened Wildlife to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
Dugong .....	Dugon, dugon .....	East Africa to southern Japan, including U.S.A. (Trust Territories).	Entire .....	4,____	NA	NA	.
.	.	.	.	.	.	.	.

Dated: July 7, 1993.  
 Richard N. Smith,  
 Acting Director, U.S. Fish and Wildlife Service.  
 [FR Doc. 93-18636 Filed 8-4-93; 8:45 am]  
 BILLING CODE 4310-55-M

**50 CFR Part 17**

RIN 1018-AC01

**Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Royal Snail and Anthony's Riversnail**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The Fish and Wildlife Service (Service) proposes to list the royal snail (*Pyrgulopsis* (= *Marstonia*) *ogmorhaphae*)

and Anthony's riversnail (*Athearnia anthoni*) as endangered species under the Endangered Species Act of 1973, as amended (Act). The royal snail is known from only two spring runs on public and private lands in the Sequatchie River system, Marion County, Tennessee. The extremely limited distribution of the royal snail and the limited amount of occupied habitat make this species extremely vulnerable to extirpation. Anthony's riversnail is known from two small populations—one in the Sequatchie River, Marion County, Tennessee, and

one in Limestone Creek, Limestone County, Alabama. These populations are threatened by the general water quality deterioration that has resulted from siltation and other pollutants contributed by such factors as coal mining, poor land use practices, and waste discharges. Comments and information are sought from the public on this proposal.

**DATES:** Comments from all interested parties must be received by October 4, 1993. Public hearing requests must be received by September 20, 1993.

**ADDRESSES:** Comments, materials, and requests for a public hearing concerning this proposal should be sent to the Field Supervisor, Asheville Field Office, U.S. Fish and Wildlife Service, 330 Ridgefield Court, Asheville, North Carolina 28806. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Mr. J. Allen Ratzlaff or Mr. Richard G. Biggins at the above address (704/665-1195, Ext. 229 or 228, respectively).

#### SUPPLEMENTARY INFORMATION:

##### Background

##### Royal Snail

The royal snail (*Marstonia ogmorhapha*) was described by Thompson in 1977 and was later reassigned to the genus *Pyrgulopsis* by Hershler and Thompson (1987). The royal snail is usually less than 5 millimeters (0.25 inches) in length. It is a short-lived (annual) species, distinguished from other closely related species by (1) relatively large size; (2) large number of whorls (5.2 to 5.8); (3) deeply incised, suture-producing, strongly shouldered whorls, which are almost flat above; (4) complete aperture, which is broadly ovate in shape with a rounded posterior corner; (5) outer lip that is slightly arched forward in lateral profile; (6) thin shell; (7) conical-terete shape; and (8) enlarged bursa copulatrix with a completely exposed duct (Thompson 1977).

The royal snail is known from only two spring runs in the Sequatchie River system in Marion County, Tennessee. Royal snails are generally found in the diatomaceous "ooze" and on leaves and twigs in the quieter pools downstream from the spring source.

While no populations of the royal snail are known to have been lost, the general deterioration of the water quality that has resulted from siltation and other pollutants contributed by coal mining, poor land use practices (e.g.,

lack of erosion control, improper application of pesticides, etc.), and waste discharges likely are impacting the species. This could result in serious, irreversible threats. Additionally, because both existing populations inhabit extremely limited areas, they are very vulnerable to extirpation from accidental toxic chemical spills or vandalism.

On December 17, 1992, the Service notified by mail (28 letters) the potentially affected Federal and State agencies, local governments, and interested individuals within the species' present range that a status review of the royal snail was being conducted. Three agencies and one private organization responded. The Tennessee Valley Authority supported proposing the species for listing. The Tennessee Wildlife Resources Agency, U.S. Soil Conservation Service, and the one responding private organization did not take a position on the potential listing.

##### Anthony's Riversnail

Anthony's riversnail was originally described from specimens collected in the "Holstein" (=Holston) River, near Knoxville, Tennessee ("Budd," in Redfield 1854). This relatively large freshwater snail, which grows to about 2.5 centimeters (1 inch) in length, is ovate and olive green to yellowish brown in color. Anthony's riversnail is listed by the Tennessee Department of Environment and Conservation as a threatened species (Bogan and Parmalee 1983). This rare aquatic snail, which coexists in the Sequatchie River with several federally listed species, was once fairly widespread in the Tennessee River system.

Anthony's riversnail is primarily a big-river species that was historically associated with shoal areas in the main stem of the Tennessee River and the lower reaches of some of its tributaries. There are historical records of the species from the lower French Broad River, Knox County, Tennessee; Nolichucky River, Green County, Tennessee; Clinch River, Jefferson County, Tennessee; Beaver Creek, Knox County, Tennessee; Little Tennessee River, Monroe and Loudon Counties, Tennessee; Tellico River, Monroe County, Tennessee; Sequatchie and Little Sequatchie Rivers and Battle Creek, Marion County, Tennessee; South Chickamauga and Tiger Creeks, Catoosa County, Georgia; Limestone Creek, Limestone County, Alabama; and Tennessee River, Knox and Loudon Counties, Tennessee, and Jackson, Limestone, and Lauderdale Counties, Alabama (Bogan and Parmalee 1983;

Gordon 1991; F. Thompson, Florida Museum of Natural History, personal communication, 1991). Presently, only two small populations are known to survive—one in the Sequatchie River, Marion County, Tennessee (M. Gordon, Tennessee Technological University, and S. Ahlstedt, Tennessee Valley Authority, personal communications 1991), and one in Limestone Creek, Limestone County, Alabama (Thompson, personal communication, 1991; Garner 1992). Many populations were lost when much of the Tennessee River and the lower reaches of its tributaries were impounded. The general deterioration of the water quality that has resulted from siltation and other pollutants contributed by coal mining, poor land use practices (e.g., lack of erosion control, improper application of pesticides, etc.), and waste discharges was likely responsible for the species' further decline. These factors continue to impact the Sequatchie River and Limestone Creek populations.

Both existing populations inhabit short river reaches; thus, they are very vulnerable to extirpation from accidental toxic chemical spills. Additionally, because these populations are isolated, their long-term genetic viability is questionable. As the Sequatchie River and Limestone Creek are isolated by impoundments from other Tennessee River tributaries, recolonization of any extirpated populations would be unlikely without human intervention.

Anthony's riversnail (*Athearnia anthonyi*) first appeared as a candidate species (category 2) on May 22, 1984, in the Invertebrate Notice or Review (49 FR 21664-21675). This taxon was reclassified from category 2 to category 3B on January 6, 1989, in the Animal Notice of Review (54 FR 554-579). The reclassification was based on information that Anthony's riversnail was not a distinct species, but that it was instead the same as another category 2 species, the boulder snail (*Leptoxis* (=Athearnia) *crassa*). Gordon (1991) examined juveniles of both species and concluded that the two snails are distinct species. However, as the boulder snail is apparently extinct (Bogan and Parmalee 1983, Gordon 1991), recognition of the snail as a separate species is irrelevant.

On June 12, 1992, the Service notified by mail (37 letters) the potentially affected Federal and State agencies, local governments, and interested individuals within the species' present range that a status review of the Anthony's riversnail was being conducted. Four agencies responded.

The Tennessee Department of Environment and Conservation supported proposing the species for listing. The Tennessee Valley Authority, U.S. Soil Conservation Service, and Tennessee State Planning Office responded to the notification letter but did not take a position on the potential listing.

On October 27, 1992, based on available information, the Service concluded that each of these snails qualified as a category 1 candidate species. The royal snail was assigned a listing priority of 5, and the Anthony's riversnail was assigned a listing priority of 2 (see *Federal Register* for September 21, 1983, (48 FR 43098) for a discussion of the Service's listing priority system).

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Act (16 U.S.C. 1531 et seq.) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal list. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the royal snail (*Pyrgulopsis* (=Marstonia) *ogmorhaphes*) and Anthony's riversnail (*Athearnia anthonyi*) are as follows:

**A. The present or threatened destruction, modification, or curtailment of its habitat or range.** The royal snail is known from only two spring runs in the Sequatchie River system in Marion County, Tennessee, and has never been found outside these areas. This extremely limited distribution, the limited amount of occupied habitat, the ease of accessibility, and the species' annual life cycle make the royal snail extremely vulnerable to extirpation. Threats to the species include siltation; road construction; logging; agricultural, municipal, industrial, and mining runoff (both direct and from subsurface flows); cattle grazing; vandalism; and pollution from trash thrown in the springs. Further, timber harvesting for wood chip mills proposed for southeastern Tennessee and northeastern Alabama could impact this species.

Anthony's riversnail was once rather widespread in the Tennessee River system. (See "Background" section for a discussion of the species' historic range.) Presently, only two small populations are known to survive—one in the Sequatchie River, Marion County, Tennessee (Gordon and Ahlstedt, personal communications, 1991), and

one in Limestone Creek, Limestone County, Alabama (Thompson, personal communication, 1991; Garner 1992).

Anthony's riversnail is primarily a big-river species that was historically associated with shoal areas in the main stem of the Tennessee River and the lower reaches of some of its tributaries. When the Tennessee River impoundments were constructed, most of the Tennessee River's riverine habitat was lost, and the lower reaches of its tributaries were also inundated. Populations that were able to survive in the remaining, limited free-flowing habitat were apparently lost due to the general deterioration of water quality that has resulted from siltation and other pollutants contributed by coal mining, poor land use practices (e.g., lack of erosion control, improper application of pesticides, etc.), and waste discharges. These factors continue to impact the Sequatchie River and Limestone Creek populations. Additionally, timber harvesting for wood chip mills proposed for southeastern Tennessee and northeastern Alabama could impact the species.

**B. Overutilization for commercial, recreational, scientific, or educational purposes.** There is no indication that overutilization has been a problem for the royal snail or Anthony's riversnail. The specific areas inhabited by these species are presently not known by the general public; until a proposed rule is published, they will likely be unaware of the presence of these rare snails. If the specific areas inhabited by these two species were revealed, it would be extremely easy for vandals to seriously impact them. Therefore, the present range of these species has been described only in general terms. Although scientific collecting is not presently identified as a threat to these species, take by private and institutional collectors could pose a threat. Federal protection could help to minimize the negative impact of illegal or inappropriate take.

**C. Disease or predation.** Although the royal snail and Anthony's riversnail are consumed by predatory animals, there is no evidence that predation or disease are serious threats to the species.

**D. The inadequacy of existing regulatory mechanisms.** The State of Tennessee prohibits taking fish and wildlife, including freshwater snails, for scientific purposes without a State collecting permit. However, the royal snail and Anthony's riversnail are generally not protected from other threats. Federal listing will provide additional protection for these species from collectors by requiring Federal

endangered species permits to take these species and by requiring Federal agencies to consult with the Service when projects they fund, authorize, or carry out may adversely affect the species.

**E. Other natural or manmade factors affecting its continued existence.** Because the royal snail is presently restricted to two small spring runs, it is very vulnerable to extirpation from accidental toxic chemical spills; and because the populations are physically isolated from each other, recolonization of any extirpated population would not be possible without human intervention. Additionally, because natural gene flow among populations is not possible, the long-term genetic viability of these remaining, isolated populations is questionable.

Both existing Anthony's riversnail populations inhabit short river reaches; thus, they are very vulnerable to extirpation from accidental toxic chemical spills. Additionally, because these populations are isolated, their long-term genetic viability is questionable. As the Sequatchie River and Limestone Creek are isolated by impoundments from other Tennessee River tributaries, recolonization of any extirpated populations would be unlikely without human intervention.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose these rules. Based on this evaluation, the preferred action is to list the royal snail and Anthony's riversnail as endangered species. The royal snail is known from only two populations in spring runs in Marion County, Tennessee. Anthony's riversnail is currently known from two small populations—one in the Sequatchie River, Marion County, Tennessee, and one in Limestone Creek, Limestone County, Alabama. These snails and their habitat have been and continue to be threatened, and Anthony's riversnail has undergone a significant range reduction. Their limited distribution also makes them very vulnerable to toxic chemical spills. Because of their restricted distributions and both snails' vulnerability to extinction, endangered status appears to be the most appropriate classification for these species. (See "Critical Habitat" section for a discussion of why critical habitat is not being proposed for these snails.)

#### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the

Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service's regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other activity and the identification of critical habitat can be expected to increase the degree of threat to the species or (2) the designation of critical habitat would not be beneficial to the species. The Service finds that designation of critical habitat is not prudent for these species, as both of the above situations are applicable.

Section 7(a)(2) and regulations codified at 50 CFR part 402 require Federal agencies to ensure, in consultation with and with the assistance of the Service, that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or destroy or adversely modify its critical habitat, if designated. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. (See "Available Conservation Measures" section for a further discussion of Section 7.) As part of the development of this proposed rule, Federal and State agencies were notified of the snails' general distribution, and they were requested to provide data on proposed Federal actions that might adversely affect the two species. No specific projects were identified. Should any future projects be proposed in areas inhabited by these snails, the involved Federal agency will already have the general distributional data needed to determine if the species may be impacted by their action; if needed, more specific distributional information would be provided.

The Section 7 regulations referenced above provide for both a "jeopardy" standard, based on the listing of a species, and a "destruction or adverse modification" standard, for cases where there is a designation of critical habitat. Each of the snails occupies very restricted stream reaches, making their future existence highly precarious. Any significant adverse modification or destruction of these species' habitat would also likely jeopardize their continued existence. Under these conditions, no additional protection for the species would accrue from critical habitat designation that would not also accrue from listing the species. Therefore, when listed, habitat protection for these species will be

accomplished through the Section 7 jeopardy standard and Section 9 prohibitions against take.

In addition, because these species are very rare, with populations restricted to extremely short stream reaches, unregulated taking for any purpose could threaten their continued existence. The publication of critical habitat maps in the *Federal Register* and local newspapers and any other publicity accompanying critical habitat designation could increase the collection threat and increase the potential for vandalism, especially during the often controversial critical habitat designation process (see "Summary of Factors Affecting the Species" section for a further discussion of threats to these species from vandals). The locations of populations of these species have consequently been described only in general terms in this proposed rule. Precise locality data is available to appropriate Federal, State, and local government agencies and individuals from the Service office described in the "ADDRESSES" section and from the Service's Cookeville Field Office, 446 Neal Street, Cookeville, Tennessee 38501.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that

activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

The Service notified Federal agencies that could have programs affecting these species. No specific proposed Federal actions were identified that would likely affect the species. Federal activities that could occur and impact the species include, but are not limited to, the carrying out or the issuance of permits for reservoir construction, stream alterations, wastewater facility development, pesticide registration, and road and bridge construction. It has been the experience of the Service, however, that nearly all section 7 consultations can be resolved so that the species is protected and the project objectives are also met.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities. In some instances, permits may be issued for a specified time to relieve undue economic hardship that would be suffered if such relief were not available. These species are not in trade, and such permit requests are not expected.

#### Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other

concerned government agencies, the scientific community, industry, or any other interested party concerning these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to the royal snail or Anthony's riversnail;
- (2) The location of any additional populations of the royal snail or Anthony's riversnail and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;
- (3) Additional information concerning the range and distribution of these species; and
- (4) Current or planned activities in the subject area and their possible impacts on the royal snail or Anthony's riversnail.

Final promulgation of the regulations on these species will take into consideration the comments and any additional information received by the Service, and such communications may lead to final regulations that differ from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of this proposal. Such requests must be made in writing and should be addressed to the Field Supervisor, Asheville Field Office, U.S. Fish and Wildlife Service, 330 Ridgefield Court, Asheville, North Carolina 28806.

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

#### References Cited

- Bogan, A. E., and P. W. Parmalee. 1983. Tennessee's rare wildlife, Volume II: the mollusks. 123 pp.
- Garner, J. T. 1992. A survey for Anthony's river snail, *Athearnia anthonyi* ("Budd," in Redfield 1854), in tributaries of the middle reaches of the Tennessee River. Unpublished report prepared for the U.S. Fish and Wildlife Service. 25 pp.
- Gordon, M. E. 1991. Species accounts for Anthony's riversnail (*Athearnia anthonyi*). Unpublished reports to The Nature Conservancy. 4 pp.
- Hershler, Robert, and Fred G. Thompson. 1987. North American Hydrobiidae (Gastropoda: Rissoacea): Redescription and Systematic Relationships of *Tryonia* Stimpson, 1865, and *Pyrgulopsis* Call and Pilsbry, 1886. *The Nautilus* 101(1):25-32.
- Redfield, J. H. 1854. Descriptions of new species of shells. *Ann. Lyc. Nat. Hist. New York* 6:130-132.
- Thompson, Fred G. 1977. The Hydrobiid snail genus *Marstonia*. *Bull. Florida State Mus., Biol. Sci.*, Vol. 21, No. 3, pp. 113-158.

#### Author

The primary authors of this proposed rule are Mr. J. Allen Ratzlaff and Mr. Richard G. Biggins (see "ADDRESSES" section) (704/665-1195, Ext. 229 and 228, respectively).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

#### Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

#### PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order, under snails, to the List of Endangered and Threatened Wildlife, to read as follows:

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
•	•	•	•	•	•		
SNAILS							
•	•	•	•	•	•		
Riversnail, ..... Anthony's.	<i>Atheamla anthonyi</i> .....	U.S.A. (TN, AL) .....	NA .....	E		NA	NA
•	•	•	•	•	•		
Snail, royal .....	<i>Pyrgulopsis (=Marstonia) ogmo-</i> <i>rhaphe.</i>	U.S.A. (TN) .....	NA .....	E		NA	NA
•	•	•	•	•	•		

Dated: July 12, 1993.

Richard N. Smith,  
Acting Director, Fish and Wildlife Service.  
[FR Doc. 93-18640 Filed 8-4-93; 8:45am]  
BILLING CODE 4310-85-P

## 50 CFR Part 17

RIN 1018-AC01

### Endangered and Threatened Wildlife and Plants; Proposed Rule To List the Plants *Ayenia limitaris* (Texas Ayenia) and *Ambrosia cheiranthifolia* (South Texas Ambrosia) as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

**SUMMARY:** The Fish and Wildlife Service (Service) proposes to list the plants *Ayenia limitaris* (Texas ayenia) and *Ambrosia cheiranthifolia* (South Texas ambrosia) as endangered species under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*). This proposal, if made final, will implement Federal protection provided by the Act for Texas ayenia and South Texas ambrosia. Critical habitat is not being proposed.

Texas ayenia is known from a single site in Hidalgo County, Texas. South Texas ambrosia has been verified recently from seven sites, four in Nueces County and three in Kleberg County, Texas. These species are threatened by habitat destruction and fragmentation through alteration and conversion of native plant communities to agricultural fields, improved pastures, and urban areas. They are also threatened with displacement by invasive non-native grasses, and possible vulnerability from lowered genetic diversity due to their present low population numbers.

**DATES:** Comments from all interested parties must be received by October 4, 1993. Public hearing requests must be received by September 20, 1993.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to Field Supervisor, U.S. Fish and Wildlife Service, Ecological Services Field Office, c/o Corpus Christi State University, Campus Box 338, 6300 Ocean Drive, Corpus Christi, Texas 78412. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Angela Brooks, at the above address (Telephone 512/994-9005).

## SUPPLEMENTARY INFORMATION:

### Background

Texas ayenia, a member of the cacao family, was first collected in Hidalgo County, Texas, by C.G. Pringle in 1888, and was named *Nephropetalum pringlei* by B.L. Robinson and J.M. Greenman in 1896. In 1960, Carmen Cristóbal revised the genus *Ayenia* and described *Ayenia limitaris* as a new species. The previously described *Nephropetalum pringlei* was not mentioned in the revision. Prior to Cristóbal's description of *Ayenia limitaris* in 1960, South Texas specimens of this species had been identified as *A. berlandieri*, a species of tropical Mexico. In 1986, Laurence Dorr and Lisa Barnett transferred *Nephropetalum pringlei* to the genus *Ayenia* and reduced it to synonymy with *Ayenia limitaris*.

Texas ayenia is a pubescent, suffrutescent shrub approximately 60–150 cm (2–5 ft) tall, with alternate, simple leaves. The cordate-based leaves are approximately 8 cm (3 in.) long and 3.5 cm (1.4 in.) wide. The inflorescences are axillary, up to 4 per node, with each inflorescence supporting two or more perfect flowers. Flower color has been reported as green, pink, or cream. The fruit is a 5-celled, pubescent capsule approximately 8 mm (0.3 in.) long, with short, curved prickles (Damude and Poole 1990).

Texas ayenia occurs at low elevations in dense subtropical woodland communities that are found on alluvial sandy clay-loam soils of Rio Grande floodplains and terraces. Although the present population occurs in the shaded understory of a remnant brush tract, previous collectors have found the plant in openings within chaparral and along the edges of thickets (Correll and Johnston 1979). The present site is a Texas Ebony-Anacua (*Pithecellobium flexicaule-Ehretia anacua*) plant community located within the Arroyo Colorado drainage. This area was once an active floodplain; however, the extent to which past flooding affected Texas ayenia is unknown.

The Texas Ebony-Anacua plant community once covered much of the Rio Grande delta. The community occurs on well drained, but heavy, soils on riparian terraces (Diamond 1990). The canopy cover in this climax community type is close to 95 percent (Damude and Poole 1990). Associated species within the community include la coma (*Bumelia celastrina*), brasil (*Condalia hookeri*), granjeno (*Celtis pallida*), and snake-eyes (*Phaulothamnus spinescens*). The Texas Ebony-Anacua community grades into the Texas Ebony-Snake-eyes community

in the drier portions of the woodland habitat (Diamond 1990). Both plant communities have been reduced to discontinuous fragments, often surrounded by agricultural fields, pastures, or urban development, and now cover less than 5 percent of their original area (Jahrsdoerfer and Leslie 1988).

Texas ayenia occurred historically in Cameron and Hidalgo counties in the U.S., and the states of Coahuila, Nuevo Leon, and Tamaulipas in Mexico. The only recent collection in Mexico was from a Tamaulipan population in 1981; however, the present status of this population is unknown (Damude and Poole 1990). Texas ayenia has not been relocated at any of the historic Cameron County locations since the early 1960's. The status report by Damude and Poole (1990) noted an observation in 1988 of six spindly individuals at the Hidalgo County site. The following year this population was noted as being reduced to one individual. Searches were undertaken in 1990 and 1991 by a number of personnel from the Service and the Texas Parks and Wildlife Department; however, no Texas ayenia individuals were relocated. In 1992, Jim Everitt of the U.S. Department of Agriculture and Service personnel relocated the remaining individual at the Hidalgo County site. This location on private property is the only recently verified site for the species.

South Texas ambrosia was first collected in San Fernando, Tamaulipas, Mexico, by Luis Berlandier in 1835, and was named *Ambrosia cheiranthifolia* by A. Gray in 1859. The first U.S. collection was made in 1932 by Robert Runyon from an area near Barrera (now Russelltown) in Cameron County, Texas (Turner 1983).

South Texas ambrosia, a member of the aster family, is a herbaceous, erect, silvery to grayish-green, rhizomatous perennial, 10–30 cm (0.3–1.0 ft) tall. Its simple leaves are usually opposite on the lower portion of the plant and alternate above. The male flower heads are arranged in inconspicuous terminal racemes 5–10 cm (2–4 in.) long. The female flower heads are in small clusters in the leaf axils just below the male racemes (Turner 1983). Due to its rhizomatous growth, a single plant may be represented by hundreds of clonal stems.

South Texas ambrosia grows at low elevations in open prairies and savannas of South Texas on soils varying from clay-loams to sandy-loams. Much of the original native habitat for South Texas ambrosia has been converted to agricultural fields, improved pastures, or urban areas. Many savanna areas